

**Louisiana Department of Environmental Quality (LDEQ)
Office of Environmental Services**

STATEMENT OF BASIS

**TIN Inc. dba Temple-Inland
Temple-Inland - Bogalusa Box Plant
Bogalusa, Washington Parish, Louisiana
Agency Interest Number: 9878
Activity Number: PER20080002
Proposed Permit Number: 2465-V5**

I. APPLICANT

Company:

Temple-Inland - Bogalusa Box Plant
PO Box 1060
Bogalusa, Louisiana 70429-1060

Facility:

TIN Inc
501 Avenue U
Bogalusa, Washington Parish, Louisiana 70427

II. FACILITY AND CURRENT PERMIT STATUS

Temple-Inland operates the Bogalusa Box Plant in Bogalusa, Washington Parish, Louisiana. The plant consists of one boiler, one corrugator, a solid fiber line, and several machine centers for final conversion of sheet stock into finished products. Emissions from the corrugator coatings, inks, laminates, paster coatings, and glue laps are vented through the roof. Other emission points include a starch silo cartridge, scrap cyclones, and space heaters.

Temple-Inland manufactures printed and non-printed corrugated and solid fiber sheet stock. The production process involves forming, cutting, and printing operations.

Corrugated paperboard is formed and prepared for printing using a corrugator. A boiler (EPN 70) is operated in conjunction with the corrugator to produce steam. The steam generated by the boiler system is used to heat the adhesive and the rollers associated with the corrugator. The corrugator directs three separate lines of paper, positioned one above the other, through a series of heated rollers. The three lines are combined and joined together with an adhesive applied to the inner surface of the top and bottom lines. The layers form the corrugated sheet stock.

The uncut, unassembled corrugated sheet stock is directed to a combination of rotary die cutters and flexographic printing presses to be cut and printed. A variety of water-

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reducible colored inks are used by the converting equipment. The colored inks are applied to the surface of the corrugated sheet stock in specific patterns to produce the desired images. The emissions generated by the various machine centers are vented through the roof vents (EPN 74).

Solid fiber paperboard is formed and cut with limited printing capabilities on the paster. The paster laminates from two to four plies of paper, positioned one above the other, through a series of combiner rollers. The paper plies are combined and joined together with an adhesive applied to the inner surface of the top and bottom lines. The layers form the solid fiber sheet stock. Two cyclones (EPNs 72 and 73) serve as exit for the pneumatic conveyance air on waste handling/collection system for the trim, punch outs, etc.

Starch is stored in a silo located outside to the northeast of the production building. Other raw materials are stored in various locations at the facility. A box plant starch silo cartridge (EPN 75) serves as a material collector to collect material from the pneumatic filling of the starch silo. Waste oil is accumulated outside to the north of the production building, and pails containing residual amounts of ink are either accumulated near the flexographic printing presses in the production building or outside to the south of the production building.

The facility is also equipped with space heaters (EPN 76).

The modification granted January 17, 2007, authorized the facility to replace and transfer equipment into and out of the facility to meet varied product demand. The types of equipment requiring frequent transfers/replacements include laminators, gluers, die-cutters, etc. All these types of equipment are currently collectively permitted under Emission Point No. 74 (Miscellaneous Roof Vents) and result in negligible changes in emissions.

The facility currently operates under Permit No. 2465-V4 issued January 17, 2007. Tin proposes to renew the Title V. There are no modifications associated with this renewal.

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III. PROPOSED PROJECT/PERMIT INFORMATION

Application

A permit application and Emission Inventory Questionnaire were submitted by TIN Inc., dba Temple-Inland on August 25, 2008, requesting a Part 70 operating permit renewal.

Project

Temple-Inland proposes to renew the Title V. There are no modifications associated with this renewal.

Proposed Permit

Permit No. 2465-V5 will be the Part 70 operating permit renewal for the Bogalusa Box Plant.

Permitted Air Emissions

Estimated emissions in tons per year are as follows:

<u>Pollutant</u>	<u>Before</u>	<u>After</u>	<u>Change</u>
PM ₁₀	25.10	25.10	-
SO ₂	0.16	0.16	-
NO _x	7.83	7.83	-
CO	21.48	21.48	-
VOC	56.60	56.60	-

VOC LAC 33:III Chapter 51 Toxic Air Pollutants (TAPs):

<u>Pollutant</u>	<u>Before</u>	<u>After</u>	<u>Change</u>
Acetaldehyde	0.34	0.34	-
Acrylic Acid	0.02	0.02	-
Ethyl Acrylate	0.01	0.01	-
Formaldehyde	0.93	0.93	-
Glycol Ethers	2.49	2.49	-
Hydroquinone	0.006	0.006	-
Methanol	2.46	2.46	-
Methyl Methacrylate	0.01	0.01	-

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<u>Pollutant</u>	<u>Before</u>	<u>After</u>	<u>Change</u>
Styrene	0.03	0.03	-
Toluene	0.05	0.05	-
Triethylamine	0.15	0.15	-
Vinyl Acetate	1.17	1.17	-
<u>Non-VOC TAP:</u>			
Lead	<0.001	<0.001	-
Ammonia	1.32	1.32	-
<u>Other VOC (TPY):</u>		36.13	

IV REGULATORY ANALYSIS

The applicability of the appropriate regulations is straightforward and provided in the Specific Requirements section of the proposed permit. Similarly, the Monitoring, Reporting and Recordkeeping necessary to demonstrate compliance with the applicable terms, conditions and standards are also provided in the Specific Requirements section of the proposed permit.

Applicability and Exemptions of Selected Subject Items

ID No.	Requirement	Note
Bogalusa Box Plan	Chemical Accident Prevention and Minimization of Consequences (LAC 33:III.Chapter 59)	Does Not Apply. Does not store any 112(r) pollutants above the threshold quantities. Shall register if a regulated substance exceeds the threshold quantity.
70 Primary Boiler (B-1)	NSPS Subpart D- Standards of Performance for Fossil-Fuel-Fired Steam Generators (40 CFR 60)	Does Not Apply. Heat input rate is less than 250 million BTU per hour.
	NSPS Subpart Da- Standards of Performance for Electric Utility Steam Generating Units (40 CFR 60)	Does Not Apply. Not an electric utility steam generating unit.
	NSPS Subpart Db- Standard of Performance for Industrial-Commercial-Institutional Steam Generating Units. (40 CFR 60)	Does Not Apply. Heat input rate is not more than 100 million BTU per hour.
	Emission Standards for Sulfur Dioxide (LAC 33:III.Chapter 15)	Does not apply. Emissions < 5 tpy
	Comprehensive Toxic Air Pollutant Emission Control Program (LAC 33:III.Chapter 51) State Only.	Exempt. Source combusts Group 1 virgin fossil fuels only and is therefore exempt as per LAC 33:III.5105.B.3.a.

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ID No.	Requirement	Note
76 Space Heaters	Emission Standards for Sulfur Dioxide (LAC 33:III.Chapter 15)	Does not apply. Emissions < 5 tpy
	Comprehensive Toxic Air Pollutant Emission Control Program (LAC 33:III.Chapter 51) State Only.	Exempt. Source combusts Group 1 only virgin fossil fuels and is therefore exempt as per LAC 33:III.5105.B.3.a.
74 Miscellaneous Roof Vents	Waste Gas Disposal (LAC 33:III.Ch.21)	Exempt per LAC 33:III.2115.H.1.c) VOC<100lb/24hr. Maintain records to verify compliance/exemption.

Streamlined Equipment Leak Monitoring Program

Unit or Plant Site	Program Being Streamlined	Stream Applicability	Overall Most Stringent Program
Bogalusa Box Plant	N/A		

MACT Requirements

The facility is subject to 40 CFR 63 Subpart KK. The monthly average as-applied organic HAP content of all materials applied must be less than 0.04 kg HAP per kg of material applied, as determined by equation 6 of 40 CFR 63.825.

Air Quality Analysis

Emissions associated with the proposed renewal were reviewed by the Air Quality Assessment Division to ensure compliance with the NAAQS and AAS. LDEQ did not require the applicant to model emissions.

General Condition XVII Activities

The facility will comply with the applicable General Condition XVII Activities emissions as required by the operating permit rule. However, General Condition XVII Activities are not subject to testing, monitoring, reporting or recordkeeping requirements. For a list of approved General Condition XVII Activities, refer to the Section VIII – General Condition XVII Activities of the proposed permit.

Insignificant Activities

All Insignificant Activities are authorized under LAC 33:III.501.B.5. For a list of approved Insignificant Activities, refer to the Section IX – Insignificant Activities of the proposed permit.

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V. PERMIT SHIELD

There is not a permit shield in this permit.

VI. PERIODIC MONITORING

EQT0002 and EQT0003 - Cyclone Vents are to be monitored by technically sound method once every 6 months and visually inspected daily.

EQT0005 - Filter Elements are to be monitored by technically sound method once every 6 months and visually inspected daily.

EQT0004 - VOC is monitored continuously.

VII. GLOSSARY

Carbon Monoxide (CO) – A colorless, odorless gas, which is an oxide of carbon.

Maximum Achievable Control Technology (MACT) – The maximum degree of reduction in emissions of each air pollutant subject to LAC 33:III.Chapter 51 (including a prohibition on such emissions, where achievable) that the administrative authority, upon review of submitted MACT compliance plans and other relevant information and taking into consideration the cost of achieving such emission reduction, as well as any non-air-quality health and environmental impacts and energy requirements, determines is achievable through application of measures, processes, methods, systems, or techniques.

Hydrogen Sulfide (H₂S) – A colorless inflammable gas having the characteristic odor of rotten eggs, and found in many mineral springs. It is produced by the reaction of acids on metallic sulfides, and is an important chemical reagent.

New Source Review (NSR) – A preconstruction review and permitting program applicable to new or modified major stationary sources of air pollutants regulated under the Clean Air Act (CAA). NSR is required by Parts C ("Prevention of Significant Deterioration of Air Quality") and D ("Nonattainment New Source Review").

Nitrogen Oxides (NO_x) – Compounds whose molecules consist of nitrogen and oxygen.

Organic Compound – Any compound of carbon and another element. Examples: Methane (CH₄), Ethane (C₂H₆), Carbon Disulfide (CS₂)

Part 70 Operating Permit – Also referred to as a Title V permit, required for major sources as defined in 40 CFR 70 and LAC 33:III.507. Major sources include, but are not limited to, sources which have the potential to emit: ≥ 10 tons per year of any toxic air pollutant; ≥ 25 tons of total toxic air pollutants; and ≥ 100 tons per year of regulated pollutants (unless regulated solely under 112(r) of the Clean Air Act) (25 tons per year for sources in non-attainment parishes).

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PM₁₀ – Particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers as measured by the method in Title 40, Code of Federal Regulations, Part 50, Appendix J.

Potential to Emit (PTE) – The maximum capacity of a stationary source to emit any air pollutant under its physical and operational design.

Prevention of Significant Deterioration (PSD) – A New Source Review permitting program for major sources in geographic areas that meet the National Ambient Air Quality Standards (NAAQS) at 40 CFR Part 50. PSD requirements are designed to ensure that the air quality in attainment areas will not degrade.

Sulfur Dioxide (SO₂) – An oxide of sulfur.

Sulfuric Acid (H₂SO₄) – A highly corrosive, dense oily liquid. It is a regulated toxic air pollutant under LAC 33:III.Chapter 51.

Title V Permit – See Part 70 Operating Permit.

Volatile Organic Compound (VOC) – Any organic compound, which participates in atmospheric photochemical reactions; that is, any organic compound other than those, which the administrator of the U.S. Environmental Protection Agency designates as having negligible photochemical reactivity.